

## **ABSTRACT**

An image processing system and method are provided for judging whether a pixelised image or a part thereof is a monochrome or a colour image. To increase the reliability of the judgement, instead of making the judgement on the level of an individual pixel, the judgement is made for substantially all the pixels of the image or image part at the same time by analyzing the cumulative histogram, wherein the distance of each pixel to the gray axis versus the logarithm of the cumulative pixel count is plotted. An advantage of the present system and the method of operating this system is their high sensitivity for detecting small colour objects in monochrome images.